

(19) 世界知的所有権機関
国際事務局



(43) 国際公開日
2004 年 7 月 15 日 (15.07.2004)

PCT

(10) 国際公開番号
WO 2004/058073 A1

(51) 国際特許分類: A61B 8/12

(KADOKURA, Masahiko) [JP/JP]; 〒229-0002 神奈川県相模原市淵野辺本町1-22-1-201 Kanagawa (JP).

(21) 国際出願番号: PCT/JP2003/016489

(22) 国際出願日: 2003 年 12 月 22 日 (22.12.2003)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(30) 優先権データ:
特願 2002-372864
2002 年 12 月 24 日 (24.12.2002) JP

(74) 代理人: 特許業務法人池内・佐藤アンドパートナーズ (IKEUCHI SATO & PARTNER PATENT ATTORNEYS); 〒530-6026 大阪府大阪市北区天満橋1丁目8番30号OAPタワー26階 Osaka (JP).

(81) 指定国 (国内): CN, KR, US.

(84) 指定国 (広域): ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(71) 出願人 (米国を除く全ての指定国について): 松下電器産業株式会社 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) [JP/JP]; 〒571-8501 大阪府門真市大字門真1006番地 Osaka (JP).

添付公開書類:
— 国際調査報告書

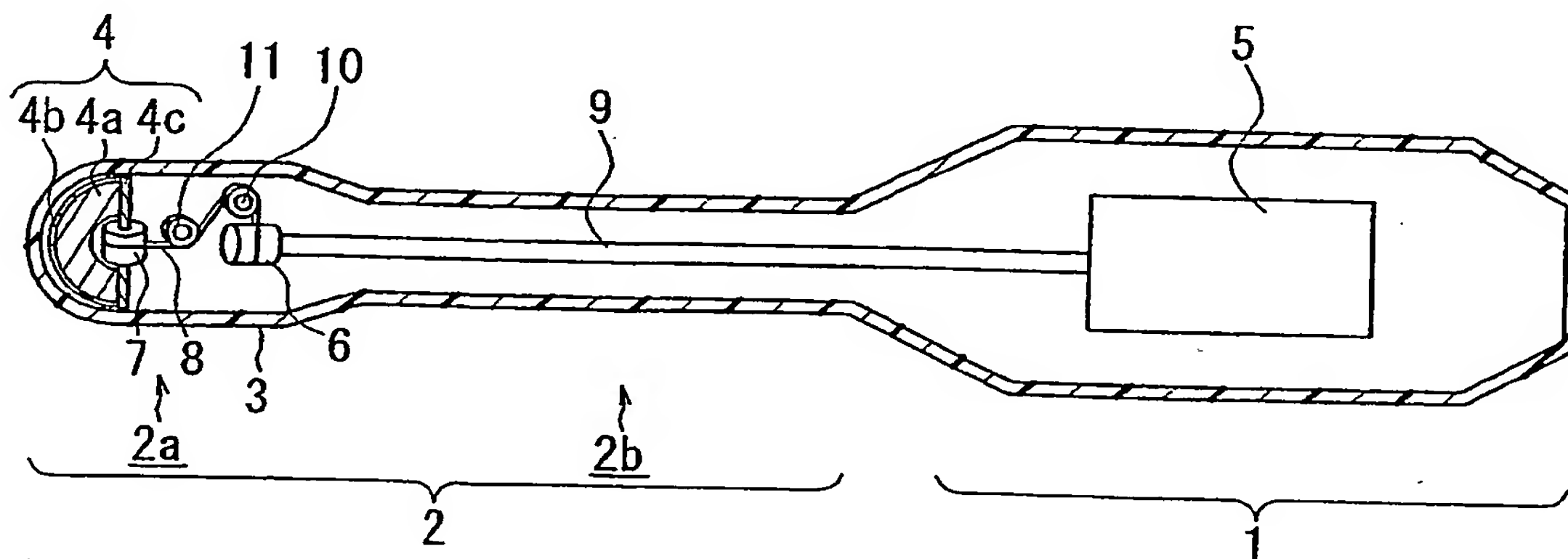
(72) 発明者; および

(75) 発明者/出願人 (米国についてのみ): 門倉 雅彦

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: ULTRASONIC PROBE

(54) 発明の名称: 超音波探触子



(57) Abstract: An ultrasonic probe, comprising an insert part inserted into a body cavity and a grip part (1) held by an operator on the outside of the body cavity, the insert part (2) further comprising a vibrator unit (4), a rotating shaft installed in the vibration unit, and an oscillation mechanism oscillating the vibrator unit (4) about the rotating shaft, the grip part (1) further comprising a motor (5) generating a drive force driving the oscillation mechanism, the oscillation mechanism further comprising a shaft (9) connected to the motor (5), a first pulley (6) coaxially fitted to the shaft (9), a second pulley (7) coaxially fitted to the rotating shaft of the vibrator unit (4), and a wire (8) stretched to be laid out between the first pulley (6) and the second pulley (7).

(57) 要約: 本発明の超音波探触子は、体腔内に挿入される挿入部と、体腔外にて操作者により把持されるグリップ部1とを有する。前記挿入部2は、振動子ユニット4と、これに設けられた回転軸と、振動子ユニット4を回転軸を中心に揺動させる揺動機構とを有し、前記グリップ部1は、前記揺動機構を駆動する駆動力を発生するモータ5を有する。前記揺動機構は、前記モータ5に連結されたシャフト9と、前記シャフト9に同軸的に取り付けられた第1のプーリ6と、前記振動子ユニット4の回転軸に同軸的に取り付けられた第2のプーリ7と、前記第1のプーリ6と前記第2のプーリ7とに掛け渡されたワイヤ8とを有する。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/16489

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ A61B8/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ A61B8/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2004
Kokai Jitsuyo Shinan Koho	1971-2004	Jitsuyo Shinan Toroku Koho	1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-327499 A (Aloka Co., Ltd.), 27 November, 2001 (27.11.01), Column 6, line 6 to column 8, line 16; Figs. 1 to 3 (Family: none)	1-6
A	JP 2001-161694 A (Toshiba Corp.), 19 June, 2001 (19.06.01), Figs. 2, 7 (Family: none)	1-6
A	JP 63-21045 A (Matsushita Electric Industrial Co., Ltd.), 28 January, 1988 (28.01.88), Page 3, upper left column, line 17 to lower right column, line 4; Fig. 1 & EP 253268 A1 & US 4895158 A	1-6

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
20 February, 2004 (20.02.04)

Date of mailing of the international search report
02 March, 2004 (02.03.04)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/16489

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5479929 A (Acuson Corp.), 02 January, 1996 (02.01.96), Column 3, lines 1 to 18; Fig. 1 (Family: none)	1-6
A	JP 10-179588 A (Toshiba Corp.), 07 July, 1998 (07.07.98), Column 9, lines 10 to 19; Fig. 3 (Family: none)	1-6
A	JP 2-57242 A (Matsushita Electric Industrial Co., Ltd.), 27 February, 1990 (27.02.90), Page 2, upper left column, line 12 to upper right column, line 12; Fig. 5 (Family: none)	1-6